

Scientific Note

NORTHERN RANGE EXTENSION FOR *HAEMATOSIPHON INODORUS* (DUGÈS) (HEMIPTERA: CIMICIDAE)

Herein we report the occurrence of a hematophagous ectoparasite, *Haematosiphon inodorus* (Dugès), in raptor nests and on nestlings at the Snake River Birds of Prey National Conservation Area (NCA), near Kuna, Idaho. Commonly known as the Mexican chicken bug, *H. inodorus* was previously reported south of 37° latitude from western Oklahoma to southern California and south to central Mexico (Usinger R. L. 1966. Monograph of Cimicidae. Horn Shafer Co., Baltimore, Maryland). The presence of *H. inodorus* in southwestern Idaho (c. 43°10' N, 116°30' W) represents a new northern latitudinal distribution and a range extension of over 800 km from the nearest previously identified population (Red Mountain, California).

We conducted reproductive surveys of prairie falcons (*Falco mexicanus* Schlegel) and golden eagles (*Aquila chrysaetos* L.) from 1991-1994. We noticed an increase from 1991 to 1992 in the number of ectoparasitized nests and in the degree of infestation. Because we suspected that the bugs contributed to prairie falcon nest failure in 1992 and 1993, we collected specimens for identification from prairie falcon nestlings, from cavities in basalt cliffs used by nesting prairie falcons, and from an active golden eagle nest. Cimicid bugs collected from seven nests during the 1992-94 breeding seasons were subsequently identified as *H. inodorus* and are in the possession of M. E. McFadzen.

Prairie falcons, golden eagles, and other raptor species, as well as California condors (*Gymnogyps californianus* Shaw), turkey vultures (*Cathartes aura* Weid), and domestic fowl, are known hosts of this ectoparasite (Grubb, T. G., W. L. Eakle & B. N. Tuggle. 1986. J. Wild. Dis. 22: 125-127).

Since 1967, biologists have noted the presence of 'bedbugs' in raptor nests at the NCA (M. Kochert, personal communication). More recently, cimicid bugs collected from prairie falcon nests at the NCA were reported as *Oeciacus vicarius* (Horvath), the cliff swallow bug (Sitter, G. 1983. M.S. Thesis. Univ. Idaho. Moscow). Although active cliff swallow (*Hirundo pyrrhonota* Vieillot) colonies were near some of the prairie falcon nests from which we obtained bug specimens, *O. vicarius* was not found in any of our samples.

Little is known about the ecological impact of *H. inodorus* on raptors. However, these parasites appear to have detrimentally influenced reproductive success. High levels of *H. inodorus* in raptor nests have been blamed for nestling mortality (Platt, S. W. 1975. Wilson Bull. 87: 557; Grubb et al. 1986; McFadzen, M. E. & J. M. Marzluff, unpublished data) and for low nestling mass and hematocrit (McFadzen, M. E. & J. M. Marzluff, unpublished data). Additionally, hematophagous ectoparasites significantly increase costs associated with reproduction (Møller, A. P. 1993. J. Anim. Ecol. 62: 309-322), which may consequently decrease fitness.

Record.—USA. Idaho. ADA CO.: nr Kuna, June/July 1992–94, M. E. McFadzen and M. S. Vekasy, ex. prairie falcon and golden eagle nestlings and nests.

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